

Reactin-Reactive Glucose Analog for Solid-Core Tumor Expurgation

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Introduction

Glucose analogs are an under-explored avenue for the treatment of cancers. With chemical tailoring, they can be made to accumulate to a greater extent within tumor tissue than in healthy tissue, enabling these special glucose analogs to be administered at higher doses.

Abstract

If you've ever poured hydrogen peroxide on a wound and watched it foam up and wondered why it foams up on a wound and not on any given surface, you should know that the reason is a chemical found in human blood plasma called "reactin." As the name implies, it reacts powerfully when exposed to oxygen.

Oxygen, itself, would provide a tempting target for chelation with a glucose analog save for the fact that oxygen in the blood stream is sequestered within hemoglobin.

The chemical reactin, on the other hand, is an ideal target which to attempt to bind with a glucose analog. As it is found everywhere in the body where there is plasma (except for solid-core tumors) it could be expected that a glucose analog which is tailored to bind with reactin would chelate with and be rendered inert through the parts of the body one does not wish to attack and to accumulate within solid tumors to an extent which would starve the tumor of chemical energy.

Conclusion

Although testing would be required, this approach to improving glucose analogs should not be discounted.